

CLAIMS

What is claimed is:

1. An apparatus, comprising:
5 an agent; and
a first test session servlet running on the agent, receiving a test description in a predetermined format from a caller, the test description including at least one predefined subtest, dynamic data, and predefined test parameters, threading a first test session that invokes the agent to run the at least one subtest, receiving subtest results from the first
10 test session, and sending the subtest results from the at least one subtest and the dynamic data back to the caller.
2. The apparatus according to claim 1, wherein:
the at least one subtest comprises at least first and second subtests, and the
15 second subtest is defined to run on a second test session; and
the second subtest
sends a second subtest description, including test parameters for the second subtest and the dynamic data, to the second test session, to run the second subtest, and
20 receives second subtest results and the dynamic data.
3. The apparatus according to claim 2, wherein the second subtest:
invokes a second test session servlet running on a second agent to thread the second test session,
25 sends the second subtest description to the second test session servlet, the second test session invoking the second agent to run the second subtest, and
receives second subtest results and the dynamic data from the second test session servlet.
- 30 4. The apparatus according to claim 3, wherein:
each test session servlet threads multiple test sessions that run in parallel.
5. An apparatus comprising:
a first agent; and

a first test session servlet running on the first agent, receiving a test description in a predetermined format from a caller, the test description including at least two subtests, dynamic data; and predefined test parameters, threading a first test session that invokes the first agent to run a first subtest of the at least two subtests, and

5 when a second subtest of the at least two subtests is defined to run on a second test session, the second subtest

 invokes a second test session servlet running on a second agent to thread the second test session,

 sends a second subtest description, including test parameters for
10 the second subtest and the dynamic data, to the second test session servlet, the second test session invoking the second agent to run the second subtest, and

 receives second subtest results and the dynamic data from the second test session servlet,

 the first test session servlet receiving subtest results from the first test
15 session and sending subtest results from all subtests and the dynamic data back to the caller.

6. The apparatus according to claim 5, wherein:

each test session servlet threads multiple test sessions that run in parallel.

20 7. The apparatus according to claim 5, wherein:

each test session has an associated data store comprising a dynamic data store and a fixed data store; and

 the dynamic data is stored in the dynamic data store and the parameters and the
25 subtest results are stored in the fixed data store.

8. The apparatus according to claim 5, wherein:

the predetermined format of the test description is a predefined XML schema in one of an HTTP post and an HTTPS post.

30 9. An apparatus, comprising:

an agent on a network; and

a first test session servlet running on the agent, receiving a test description in a predetermined format over the network from a caller, the test description including at least one predefined subtest, dynamic data, and predefined test parameters, threading a first test session that invokes the agent to run the at least one subtest to test the network, receiving subtest results from the first test session, and sending the subtest results from the at least one subtest and the dynamic data back to the caller.

10. The apparatus according to claim 9, wherein:
the at least one subtest comprises at least first and second subtests, and the second subtest is defined to run on a second test session; and
the second subtest
sends a second subtest description, including test parameters for the second subtest and the dynamic data, to the second test session, to run the second subtest to test the network, and
receives second subtest results and the dynamic data.

11. The apparatus according to claim 10, wherein:
each test session servlet threads multiple test sessions that run in parallel.

12. The apparatus according to claim 9, wherein the agent comprises:
a computer.

13. The apparatus according to claim 9, wherein:
the agent has a default network interface and a transient network interface;
the dynamic data specifies using the transient network interface; and
the first test session servlet uses the transient network interface when running the at least one subtest.

14. The apparatus according to claim 9, wherein:
the predetermined format of the test description is a predefined XML schema in one of an HTTP post and an HTTPS post.

15. The apparatus according to claim 9, wherein:
the agent is one of a plurality of agents connected to the network, the plurality of agents respectively running a plurality of test session servlets; and
the caller is not one of the plurality of agents.

16. The apparatus according to claim 9, wherein:
execution of the at least one subtest is not scheduled through a centralized agent
scheduler.

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17. The apparatus according to claim 9, wherein:
the first test session has an associated data store comprising a dynamic data
store and a fixed data store; and
the dynamic data is stored in the dynamic data store and the parameters and the
subtest results are stored in the fixed data store.

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18. The apparatus according to claim 10, wherein the second subtest:
invokes a second test session servlet running on a second agent on the network
to thread the second test session,
sends the second subtest description to the second test session??, which
invokes the second agent to run the second subtest, and
receives second subtest results and the dynamic data from the second test
session servlet.

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19. The apparatus according to claim 18, wherein:
each test session has an associated data store comprising a dynamic data store
and a fixed data store; and
the dynamic data is stored in the dynamic data store and the parameters and the
subtest results are stored in the fixed data store.

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20. An apparatus, comprising:
an agent; and
a test session servlet running on the agent, receiving a test from a caller,
threading a test session that invokes the agent to run the test, receiving test results from
the test session, and sending the test results back to the caller.

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21. A method comprising:
receiving a test description in a predetermined format over a network from a
caller, the test description including at least one predefined subtest, dynamic data, and
predefined test parameters;

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threading a test session that invokes an agent on the network to run the at least one subtest to test the network; and

sending results from the at least one subtest and the dynamic data back to the caller.

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